

**Amendments to the Drawing Figures:**

The attached drawing sheet includes a new FIG. 2.

Attachment: New Sheet.

### **REMARKS/DISCUSSION OF ISSUES**

By this Amendment, Applicant amends the specification, and adds a new drawing sheet including FIG. 2. Applicant also amends claims 2-18 and 20-22, and adds a new claim 25. Accordingly, claims 2-18, 20-22 and 25 remain pending in the application.

Reexamination and reconsideration are respectfully requested in view of the following Remarks.

### **DRAWINGS**

By this Amendment, Applicant furnishes a new drawing sheet with a drawing labeled as FIG. 2. The specification is also amended to make explicit reference to this new drawing. Accordingly, Applicant respectfully request that the objection to the drawings be withdrawn.

### **SPECIFICATION**

By this Amendment, Applicant amends the specification to provide a brief description of FIGs. 1 and 2. Accordingly, Applicant respectfully requests that the objection to the specification be withdrawn.

### **CLAIM OBJECTIONS**

The Office Action objects to all of the claims on numerous grounds.

By this Amendment, Applicant respectfully submits that he has addressed all of these objections and overcome the objections, with the following exceptions.

Applicant respectfully traverses the objection to claim 2. Claim 2 recites generating a first, imaging, magnetic field with a spatial distribution of the imaging magnetic field strength such that the examination area consists of a first sub-area with lower magnetic field strength and a second sub-area with a higher magnetic field strength. Applicant respectfully submits that this phrase is perfectly clear and has no ambiguity.

The Office Action objects to claims 6, 7, 11, 12, 15, 20 and 21 because they

*“fail to set forth further steps in the method.”*

The undersigned attorney is unaware of any rule that requires that each dependent method claim in a U.S. patent must set forth further steps in the method. Indeed, the undersigned attorney has prosecuted dozens of issued U.S. patents which include dependent method claims that do **not** set forth further steps in the method. Indeed, the undersigned attorney would venture that the USPTO has issued tens of thousands of presumably-valid U.S. patents which include dependent method claims that do **not** set forth further steps in the method. Surely these patents are not all defective? Therefore, Applicant traverses this ground of objection to claims 6, 7 11, 12, 15, 20 and 21.

Meanwhile, claims 6, 7 11, 12, 15, 20 and 21 each DO *“further limit the parent claim”* – which is all that is required by 37 C.F.R. 1.75(c). For example, in the method of claim 15, the “step” of exposing the magnetic particles in the examination area to a second, varying, magnetic field includes employing a varying magnetic field with a frequency of between 0.7 and 1.3 MHz. No such frequency band limitation is present in the method of claim 15.

Accordingly, Applicant respectfully requests that the objections to the claims be withdrawn.

### **35 U.S.C. § 112, FIRST PARAGRAPH**

The Office Action rejects claims 2-18 and 20-22 under 35 U.S.C. § 112, first paragraph.

The Office Action states that the *“specification does not sufficiently enable a skilled artisan to make and use an examination area consisting of sub-areas with magnetic field strengths.”*

Applicant respectfully submits that the specification fully enables each of the claims 2-18 and 20-22.

Regarding the feature in claims 2 and 22 of a first, imaging, magnetic field with a spatial distribution of the imaging magnetic field strength such that the examination area consists of a first sub-area with lower magnetic field strength and a second sub-

area with a higher magnetic field strength, Applicant points to

The Office Action misconstrues page 3, paragraph 1. The cited text describes a preferred embodiment where a varying magnetic field is superimposed on the imaging magnetic field at least some of the time. The text does NOT teach that the sub-areas are subjected to different field strengths by way of the superimposition. Indeed, the specification teaches at page 6, lines 19-26 and page 5, lines 1-12 that the imaging magnetic field is created with a gradient so that a first sub-area has a lower magnetic field strength and a second sub-area has a higher magnetic field strength. In particular, page 6, lines 22-26 teaches one specific embodiment for generating these sub-areas by means of a Maxwell coil arrangement.

So the imaging magnetic field itself generates the first sub-area with a lower magnetic field strength and second sub-area with a higher magnetic field strength, and the second, varying. Magnetic field only changes the spatial locations of these two areas.

Therefore Applicant specifically traverses the statement in the Office Action that “[n]owhere does the specification describe or illustrate the application of an imaging field with spatially variable strength.”

Accordingly, Applicant respectfully requests that the rejections of claims 2-18 and 20-22 be withdrawn.

### **35 U.S.C. § 112, SECOND PARAGRAPH**

The Office Action rejects claims 4, 7, 8 and 20 under 35 U.S.C. § 112, second paragraph on various grounds.

By this Amendment, Applicant respectfully submits that all of these rejections are addressed and overcome.

Accordingly, Applicant respectfully requests that the rejections of claims 4, 7, 8 and 20 under 35 U.S.C. § 112, second paragraph be withdrawn.

### **35 U.S.C. § 103**

The Office Action rejects: claims 2-9, 11-13, 16-18 and 22 under 35 U.S.C. §

103 over Tournier et al. U.S. Patent Application Publication 2002/0168321 (“Tournier”) in view of Schneider et al. U.S. Patent 6.726,650 (“Schneider”); claims 10, 14, 15 and 20 under 35 U.S.C. § 103 over Tournier in view of Schneider and further in view of Ivkov U.S. Patent Application Publication 2006/0142749 (“Ivkov”); and claim 21 under 35 U.S.C. § 103 over Tournier in view of Schneider and further in view of Rand U.S. Patent Application Publication 2005/0066961 (“Rand”).

Applicant respectfully traverses all of these rejections for at least the following reasons.

At the outset, Applicant relies upon at least the following standards with respect to a proper rejection under 35 U.S.C. § 103.

First, a rejection on obviousness grounds under 35 U.S.C. § 103 cannot be sustained by mere conclusory statements: instead there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. In re Kahn, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006). See also KSR International Co. v. Teleflex Inc., 550 U.S. 398, 82 USPQ2d 1385, 1396 (2007) (quoting Federal Circuit statement with approval). See M.P.E.P. § 2141(III). Second, there must be a reasonable expectation of success. “*The mere fact that references can be combined or modified does not render the resultant combination obvious unless the results would have been predictable to one of ordinary skill in the art.*” M.P.E.P. § 2143.01(III) (citing KSR International Co. v. Teleflex Inc., 82 USPQ2d 1385, 1396 (2007)). Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. “*All words in a claim must be considered in judging the patentability of that claim against the prior art.*” M.P.E.P. § 2143.03 (citing In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970)). An integral part of this analysis requires establishing the level of ordinary skill in the art of invention. See M.P.E.P. §§ 2141(II)(C) and 2141.03.

#### Claim 2

Among other things, the method of claim 2 includes generating a first, imaging, magnetic field with a spatial distribution of the imaging magnetic field strength such

that the examination area consists of a first sub-area with lower magnetic field strength and a second sub-area with a higher magnetic field strength.

The Office Action states that Tournier discloses these features in paragraphs 10, 26 and 35.

Applicant respectfully disagrees. The cited paragraphs disclose that contrast agents can be employed to enhance an MRI image. However, they do not disclose generating a first, imaging, magnetic field with a spatial distribution of the imaging magnetic field strength such that the examination area consists of a first sub-area with lower magnetic field strength and a second sub-area with a higher magnetic field strength.

So Applicant respectfully submits that no combination of Tournier and Schneider could produce the method of claim 2.

Also among other things, the method of claim 2 includes changing the spatial location of a first sub-area with lower magnetic field strength and a second sub-area with a higher magnetic field strength in the examination area so that the magnetization of the particles changes locally.

The Office Action fairly admits that Tournier does not disclose this combination of features. However, the Office Action states that Schneider discloses applying a varying magnetic field to magnetic particles.

Schneider discloses an injector device for injecting a liquid that includes magnetic particles into a patient. To keep the particles sufficiently agitated in the injector to prevent settling or agglomeration, Schneider teaches that the particles in the injector may be subjected to a varying magnetic field to keep them in motion.

However, Schneider does not disclose changing the spatial location of a first sub-area with lower magnetic field strength and a second sub-area with a higher magnetic field strength in the examination area.

So, again, Applicant respectfully submits that no combination of Tournier and Schneider could produce the method of claim 2.

Also among other things, in the method of claim 2 the magnetic particles before or during the determining of the spatial distribution of the magnetic particles in

the examination area are exposed to a second, varying, magnetic field so as at least to reduce agglomeration of the magnetic particles.

Schneider does not disclose or suggest applying a varying magnetic field to an examination area during a magnetic imaging operation.

The Office Action fails to provide a reasoning with some rational underpinning to support the proposed combination of Tournier and Schneider. Instead, the Office Action makes the conclusory statement that "it would have been obvious." As noted above, a rejection on obviousness grounds under 35 U.S.C. § 103 cannot be sustained by such conclusory statements.

Therefore, for at least these reasons, Applicant respectfully submits that claim 2 is patentable over the cited art. Accordingly, Applicant respectfully requests that the rejection of claim 2 be withdrawn, and claim 2 be allowed.

Claims 3-9, 11-13, 16-18

Claims 3-9, 11-13, 16-18 depend from claim 2 and are deemed patentable for at least the reasons set forth above with respect to claim 2. Accordingly, Applicant respectfully requests that the rejections of claims 3-9, 11-13, 16-18 be withdrawn, and claims 3-9, 11-13, 16-18 be allowed.

Claim 22

Claim 22 includes similar features to those described in detail above with respect to claim 2, and is deemed patentable over the cited art for at least the reasons set forth above with respect to claim 2. Therefore, for at least these reasons, Applicant respectfully submits that claim 22 is patentable over the cited art. Accordingly, Applicant respectfully requests that the rejection of claim 22 be withdrawn, and claim 22 be allowed.

Claims 10, 14, 15, 20 and 21

Claims 10, 14, 15, 20 and 21 depend from claim 2. Applicant respectfully submit that Ivkov and Rand do not remedy the shortcomings of Tournier and Schneider as set forth above with respect to claim 2. Therefore, for at least these reasons, Applicant respectfully submits that claims 10, 14, 15, 20 and 21 are patentable over the cited art. Accordingly, Applicant respectfully requests that the

rejections of claims 10, 14, 15, 20 and 21 be withdrawn, and claims 10, 14, 15, 20 and 21 be allowed.

**CLAIM 25**

New claim 25 depends from claim 2 and is deemed patentable for at least the reasons set forth above with respect to claim 2.

**PROVISIONAL DOUBLE-PATENTING REJECTIONS**


Applicant acknowledges the provisional double patenting rejections of claims 2-18 and 20-22 and is prepared to submit a Terminal Disclaimer if appropriate if and when these provisional rejections mature.

**CONCLUSION**

In view of the foregoing explanations, Applicant respectfully requests that the Examiner reconsider and reexamine the present application, allow claims 2-18, 20-22 and 25 and pass the application to issue. In the event that there are any outstanding matters remaining in the present application, the Examiner is invited to contact Kenneth D. Springer (Reg. No. 39,843) at (571) 283.0720 to discuss these matters.

Respectfully submitted,

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